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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,334	08/04/2003	William S. Halliday	154-23110-USCP	6745

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PAUL S MADAN
MADAN, MOSSMAN & SRIRAM, PC
2603 AUGUSTA, SUITE 700
HOUSTON, TX 77057-1130

EXAMINER

TUCKER, PHILIP C

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,334

Applicant(s)

HALLIDAY ET AL.

Examiner

Philip C. Tucker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 20-29, 31-38 and 40-43 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 40-42 is/are allowed.
- 6) ☒ Claim(s) 20-29, 31-38 and 43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/26/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 20-29, 31-38 and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Stowe (6703351)

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Stowe teaches the same method of the present invention utilizing the same latex containing drilling fluid (see the claims). The filing date of Stowe is prior to the claimed filing date of the present application, since it claims priority back to provisional application 60/211,162, while the present application does not, and it thus constitutes prior art.

3. Claims 20-24, 26-29, 31, 33, 36 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2131067.

GB '067 teaches a method of drilling using a drilling fluid comprising a latex, water, surfactant and bentonite which is an alumino-silicate, which is the same as the precipitating agent of the present invention (see the claims). GB '067 teaches the use of PD6 and PD7 latexes which are carboxylated styrene/butadiene copolymers, since they possess carboxylic acid groups (example 12). The latexes would have particle sizes within the scope of claim 37. Such would inherently inhibit borehole wall invasion as in the present invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 20-24, 26-29, 31, 33, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2131067.

GB '067 teaches a method of drilling using a drilling fluid comprising a latex, water, surfactant and bentonite which is an alumino-silicate, which is the same as the precipitating agent of the present invention (see the claims). The latexes would have

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particle sizes within the scope of claim 37. GB '067 differs from the present invention in not specifically exemplifying the use of a polyethylene latex. GB however teaches that hydrocarbon homopolymers or copolymers are preferred for use as the latex polymer, and specifically teaches ethylene/propylene copolymer. It would be obvious to one of ordinary skill in the art to utilize polyethylene as the polymer of the latex of GB '067, given the teaching that hydrocarbon homopolymers or copolymers are preferred for use as the latex polymer, and the specific teaching of ethylene/propylene copolymer. This teaching would clearly lead one of ordinary skill in the art to utilize ethylene as a homopolymer in the latex of GB '067. Homologues with such similar structures would be expected to have similar utility. Such would obviously inhibit borehole wall invasion as in the present invention.

6. Applicant's amendments and arguments have been considered but are not deemed persuasive. With respect to Stowe, such has a different inventive entity, and such has an earlier effective filing date, since it claims priority back to the provisional application. The present application does not claim priority back to the provisional application, and thus has a later effective filing date.

7. With respect to the use of polyethylene in the invention of GB '067, there is a clear preferential suggestion of the reference to use hydrocarbon polymers which can be homopolymers or copolymers (see last two lines of page 1). Thus the teaching of the use of an ethylene/propylene copolymer would be extremely clear motivation to use either of an ethylene or propylene homopolymer, in view of such teaching on the last

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two lines of page 1 of GB '067. One of ordinary skill in the art having such teaching before them would almost instantly envisage the use of a homopolymer of ethylene or propylene. Furthermore, the homologues of ethylene/propylene copolymer with such similar structures would be expected to have similar utility (Ex parte Faque 121 USPQ 425). One of ordinary skill in the art would thus have a great expectation of success in the use of polyethylene in the latex of GB '067.

8. A rejection under 35 USC 102 over GB '067 is reinstated in view of such teaching the use of carboxylated styrene/butadiene copolymers.


9. Claims 40-42 are allowable over the art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C. Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Philip C Tucker
Primary Examiner
Art Unit 1712

PCT-4050